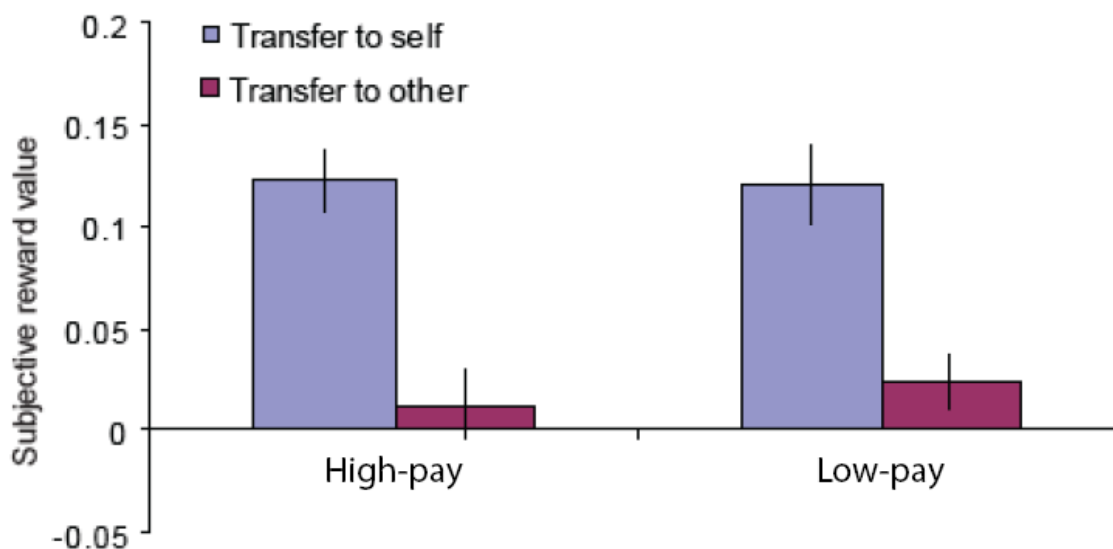


## SUPPLEMENTARY INFORMATION

**Supplementary Figure 1.** Results of behavioural experiments with no inequality. Estimated coefficients from a linear regression of the behavioural ratings on the transfers to self and other, when both members of the pair were high-pay or low-pay. All participants in these versions of the experiment rated transfers to themselves more highly than transfers to the other player. There were no significant differences in the ratings between groups (transfer to self:  $t_{(34)} = 0.1$ ,  $p = 0.9$ , two-tailed; transfer to other:  $t_{(34)} = 1.0$ ,  $p = 0.3$ , two-tailed). Error bars represent SEM.



**Supplementary Table 1.** Regions displaying a significant [Low-pay - High-pay] effect for [Transfer to Self - Transfer to Other] ( $p < 0.001$  uncorrected with an extent threshold of 5 voxels)

Brain region	MNI coordinates			Peak t-value	Size (# voxels)
	x	y	z		
inferior frontal gyrus (R)	60	15	12	4.39	26
<sup>1</sup> ventral striatum (L)	-12	9	-6	4.36	55
inferior frontal gyrus (L)	-39	36	3	4.32	29
posterior putamen (L)	-30	-21	0	4.24	10
<sup>2</sup> medial prefrontal cortex (L)	-15	42	0	4.11	25
superior medial frontal gyrus (R)	9	30	42	4.10	38
thalamus (L)	-6	-6	6	4.07	37
middle temporal gyrus (L)	-51	-12	-21	4.05	7
inferior frontal gyrus (L)	-45	6	21	4.02	16
lingual gyrus (R)	24	-63	-9	3.97	31
<sup>3</sup> ventromedial prefrontal cortex (R)	12	39	-15	3.85	7
anterior insula (L)	-24	21	-9	3.85	11
paracentral lobule (L)	-6	-24	57	3.83	6
dorsal superior frontal gyrus (L)	-18	30	54	3.78	12
medial prefrontal cortex (R)	12	45	6	3.60	6
dorsomedial prefrontal cortex (R)	15	39	30	3.58	11
posterior superior medial frontal gyrus (R)	15	21	60	3.56	6

<sup>1</sup>Survives small volume correction (SVC) at  $p < 0.05$  within an 8-mm sphere centered on MNI coordinates from previous work: [x = -10, y = 9, z = 0]

<sup>2</sup>Survives SVC ( $p < 0.05$ ) based on coordinates [x = -8, y = 40, z = -13]

<sup>3</sup>Survives SVC ( $p < 0.05$ ) based on coordinates [x = 9, y = 45, z = -13]

**Supplementary Table 2: Regions displaying a significant [High-pay - Low-pay] effect for [Transfer to Self - Transfer to Other],  $p < 0.001$ , contiguity threshold of 5 voxels**

Brain region	MNI coordinates			Peak t-value	Size (# voxels)
	<i>x</i>	<i>y</i>	<i>z</i>		
precuneus (R)	6	-57	54	4.5	25